

REMARKS

This Amendment is in response to the Office Action dated December 26, 2008. Reconsideration and allowance of this application, as amended, is respectfully requested.

Claims 18-20 were rejected under 35 USC §112 as lacking antecedent basis. Claims 1-20 were rejected under 35 USC §101 as being directed to non-statutory subject matter. Claims 1, 3-5, 7, 9-10, 14-15, 17-18, and 20 were rejected under 35 USC §102 as being anticipated by Jobsis et al. (U.S. Patent 4,321,930, "Jobsis '930"). Claims 1 and 7-8 were rejected under 35 USC §102 as being anticipated by Lewendowski et al. (U.S. Patent 6,839,583, "Lewendowski"). Claims 2 and 12 were rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Brossia et al. (U.S. Patent 4,851,817, "Brossia") and Hok (U.S. Patent 5,786,592). Claim 6 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Jobsis et al. (U.S. Patent 4,510,938, "Jobsis '938"). Claim 11 was rejected under 35 USC §103 as being obvious over Lewendowski in view of Mannschke (U.S. Patent 4,362,360). Claim 13 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Mannschke. Claim 16 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Mannheimer (U.S. Patent 5,842,982). Claim 19 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Pewzner et al. (U.S. Patent 7,130,672, "Pewzner"). All rejections are traversed in so far as the rejections are applicable to the present claims

At entry of this paper, Claims 1-8, 10, and 13-21 will be pending for further consideration and examination in the application. By the present amendment, claims 1 and 18-19 have been amended and claims 9, 11, and 12 have been cancelled without prejudice, with the features of now cancelled claims 9 and 12 being

incorporated into independent claims 1 and 18. New claim 21 has been added.

Support for new claim 21 can be found in originally filed claims 1 and 12.

An embodiment of the invention, as recited in claim 1, shown by way of example in Figures 2-3, includes a measuring probe including a holder portion (e.g., element 104) which is adapted to be attached to a subject (e.g., see Figs. 14-15); an optical fiber (e.g., elements 102, 103) for at least one of irradiation and detection, whose distal end portion on a subject side is retained by the holder portion; wherein the optical fiber is led out from a side surface of the holder portion and is bent (e.g., see elements 102 and 103 in Figs.2-3) inside the holder portion such that the distal end portion is directed to the subject when the holder portion is attached to the subject; wherein an optical fiber fixing member (e.g., element 203) which fixes the distal end portion of the optical fiber is arranged in the holder portion; and wherein an optical fiber protecting member (e.g., element 204) which protects the bent portion of the optical fiber is arranged inside the holder portion.

One of the benefits of the present invention is that when the measuring probe is attached to the subject, and when the end portion of the optical fiber is pushed by the subject, the structure of the present invention (in particular the optical fiber protecting member) can absorb deformation of the optical fiber. This results in the benefit of preventing damage to the optical fiber when the end portion of the optical fiber is pushed by the subject.

INFORMATION DISCLOSURE STATEMENT

The IDS filed on June 9, 2005 incorrectly listed a document as WO 00/07562. The correct number of the document is WO 00/74562. A corrected IDS statement is attached to this response.

DRAWINGS

The drawings were objected to under 37 C.F.R. § 1.83(a), regarding the subject matter of claim 11, in that a “spring mechanism” of claim 11 was not shown in the figures, and that a “fixing member” (element 203) is apparently not distinguishable from “height adjustment jig” (element 205) in Fig.2. In addition, Figure 3 was objected to under 37 C.F.R. § 1.83(p)(5) for including the reference character “206” that is not mentioned in the specification.

In regards to the spring mechanism, claim 11 has been cancelled, rendering the objection moot. In regards to the objection regarding non-distinguishing illustration, applicants are providing replacement Figure 2 which more clearly distinguishes element 203 from element 205 in that element 205 is not shown with hatching lines extending in a different direction from those of element 203. No new matter has been added. In addition, the applicants are providing replacement Figure 3 that utilizes “103” instead of “206”. The Applicant respectfully submits that the objections to the drawings should now be withdrawn, and acceptance of replacement Figures 2 and 3 is requested.

REJECTION UNDER 35 USC §112

Claims 18-20 were rejected under 35 USC §112, second paragraph, because of the recitation of the feature of “measuring probe portion” in line 7 of independent claim 18. The rejection asserted that the feature “lacks antecedent basis.” Claim 18 has been amended to overcome the rejections. Accordingly, reconsideration and withdrawal of such §112 rejections are respectfully requested.

REJECTION UNDER 35 USC §101

Claims 1-20 were rejected under 35 USC § 101, appearantly based upon the allegation that the claims are directed to the human body ("a subject"). Applicants respectfully traverse these rejections. The recitation of "a subject" in independent claims 1 and 18 is in order to provide context to the functionality and positioning of the claimed apparatus, not in order to obtain a property right in a human being. This fact has been clarified by the amendment of the independent claims 1 and 18 (and new independent claim 21) to recite "a holder portion which is adapted to be attached to a subject". Also, the independent claims expressly recite features that are present when the holder portion is attached to the subject. Accordingly, reconsideration and withdrawal of such §101 rejections are respectfully requested.

REJECTION UNDER 35 USC §102

Claims 1, 3-5, 7, 9-10, 14-15, 17-18, and 20 were rejected under 35 USC §102 as being anticipated by Jobsis et al. (U.S. Patent 4,321,930, "Jobsis '930"). Claims 1 and 7-8 were rejected under 35 USC §102 as being anticipated by Lewendowski et al. (U.S. Patent 6,839,583, "Lewendowski"). All 35 USC §102 rejections are respectfully traversed. The applicants respectfully request withdrawal of the rejections and allowance of the claims.

In order to properly support a §102 anticipatory-type rejection, "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." In re Robertson, 169 F.3d 743 (Fed. Cir. 1999). The applied art does not adequately support a §102 anticipatory-type rejection because, at minimum, such applied art does not disclose (or suggest) the following discussed features of Applicant's claims.

In regards to newly amended independent claim 1, the claim has been amended to recite features from now-cancelled claims 9 and 12. By the Examiner's admission in the rejection of claim 12 on page 10 of the Office Action, the Jobsis '930 reference "lacks: an optical fiber protecting member which protects the bent portion of the optical fiber ... arranged inside the holder portion" as recited in originally filed claim 12, and now recited in amended claim 1. In addition, the Office Action did not apply the Lewendowski reference to reject originally filed claims 9 or 12, whose features are now amended into claim 1.

In regards to amended independent claim 18, the arguments recited in regards to independent claim 1 apply to independent claim 18 as well. In addition, the Office Action did not apply the Lewendowski reference to reject originally filed claim 18.

In regards to new independent claim 21, the arguments recited in regards to independent claim 1 apply to independent claim 21 as well. In regards to dependent claims 3-5, 7, 9-10, 14-15, 17, and 20, which were rejected under 35 USC §102 as being anticipated by Jobsis '930, and claims 7-8 which were rejected under 35 USC §102 as being anticipated by Lewendowski, these claims all inherit the deficiencies of the rejections of amended independent claims 1 and 18 under Jobsis '930 and under Lewendowski.

All dependent claims are allowable because they depend from allowable independent claims 1, 18, or 21. In addition, the dependent claims recite additional allowable features. For example, dependent claim 5 recites the feature of "wherein a protecting groove into which the optical fiber is inserted is formed in at least one of the first member and the second member." The rejection of claim 5 on the basis of Jobsis '930 incorrectly cites Fig.8 as showing a "protecting groove." However, Fig.8

of Jobsis '930 is merely a cross-section of Fig.6 along the line 8-8, as disclosed in col.5, lines 53-55. Therefore Fig.8 does not disclose grooves, as recited in claim 5, but holes in the module (element 75). Therefore the rejection of claim 5 under Jobsis '930 is in error, and should be withdrawn.

As a result of all of the foregoing, it is respectfully submitted that the applied art does not support §102 rejections of Applicant's claims. Accordingly, reconsideration and withdrawal of such §102 rejections are respectfully requested.

REJECTION UNDER 35 USC §103

Claims 2 and 12 were rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Brossia et al. (U.S. Patent 4,851,817, "Brossia") and Hok (U.S. Patent 5,786,592). Claim 6 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Jobsis et al. (U.S. Patent 4,510,938, "Jobsis '938"). Claim 11 was rejected under 35 USC §103 as being obvious over Lewendowski in view of Mannschke (U.S. Patent 4,362,360). Claim 13 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Mannschke. Claim 16 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Mannheimer (U.S. Patent 5,842,982). Claim 19 was rejected under 35 USC §103 as being obvious over Jobsis '930 in view of Pewzner et al. (U.S. Patent 7,130,672, "Pewzner"). All 35 USC §103 rejections are respectfully traversed. The applicants respectfully request withdrawal of the rejections and allowance of the claims.

In regards to amended independent claims 1 and 18, and new independent claim 21, all of which recite features of originally filed (and now-cancelled) claim 12, none of the references cited in the rejection (Brossia, Hok), either alone or in combination, disclose or suggest the features recited in originally filed (and now-

cancelled) claim 12: "wherein an optical fiber protecting member which protects the bent portion of the optical fiber is arranged inside the holder portion."

More specifically, Brossia does not disclose or suggest the feature of "an optical fiber protecting member", as recited in independent claims 1, 18, and 21. Instead, Brossia discloses in Fig.2 and col.4, lines 5-11 (the sections of Brossia cited in the rejection of now-cancelled claim 12) that "the sensor probe means 30 comprises a portion of the fiber optical cable means 21 from which the sheathing material 27 and the coating material have been removed to provide an exposed medium contact area in which the core fiber or fibers have no sheathing nor coating precluding transfer of a portion of the light therethrough. The exposed medium contact area is preferably formed at an U-shaped loop section 50, as shown in FIG. 2, of the fiber optical cable means which has a curved portion 52 and parallel side portions 54, 56."

Brossia's sheathing material (element 27 in Fig.2) corresponds to the outer peripheral coating disclosed in the present application (e.g., claim 2, and paragraph [0036] of the PG-PUB 2006/0058594 of the present application), not to the feature of "wherein an optical fiber protecting member which protects the bent portion of the optical fiber is arranged inside the holder portion", as recited in independent claims 1, 18, and 21. In fact, as shown in Fig.2, Brossia's sheathing material (element 27 in Fig.2) is cut away at the bent portion of the optical fiber, and therefore cannot protect the bent portion of the optical fiber.

In addition, Brossia fails to disclose or suggest the feature of "wherein an optical fiber fixing member which fixes the distal end portion of the optical fibers is arranged in the holder portion", as recited in independent claims 1 and 18. This is the case even if we assume, *arguendo*, that Brossia's cylindrical tubular member

(Fig.2, element 60; col.4, lines 19-22) corresponds to the “holder portion” recited in independent claims 1 and 18. In summary, Brossia fails to disclose or suggest either the feature of an “optical fiber fixing member”, or the feature of an “optical fiber protecting member” as recited in independent claims 1 and 18.

Like Brossia, Hok also fails to disclose or suggest the feature of an “optical fiber protecting member.” Hok discloses a sensor (“pulse oximetry sensor”, col.1, line 67) that includes bent portions of fiber optic cable bundles (Fig.1, elements 7a and 7b), that are inside of sides of a clamp (Fig.1, elements 8 and 9; col.2, lines 58-62). Hok also discloses “specially molded parts” (Fig.1, elements 17 and 18; col.3, line 8-22) positioned inside the clamps, into which are inserted the fiber optic cable bundles.

Even assuming, *arguendo*, that Hok’s clamp (elements 8 and 9) corresponds to a “holder portion” as recited in independent claims 1, 18, and 21, and Hok’s “specially molded parts” (elements 17 and 18) correspond to “an optical fiber fixing member which fixes the distal end portion of the optical fiber is arranged in the holder portion” as recited in independent claims 1 and 18, Hok still fails to disclose or suggest the feature of an “optical fiber protecting member” as recited in independent claims 1, 18, and 21.

Therefore, neither Brossia, nor Hok, either alone or in combination, disclose or suggest all the features of independent claims 1, 18, and 21. All dependent claims are allowable because they depend from allowable independent claims 1, 18, or 21.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) does not support a §103 rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §103 rejections are respectfully requested.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 1369.45130X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,
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